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These search terms have been highlighted: **silica I 1500 porous hollow**

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## Cosmetic Raw Material

# Micro Beads

SUNJIN CHEMICAL CO is an R&D driven company that brings innovations to the cosmetic industry.

We have a scope of technologies such as microencapsulation technology, encapsulation and composition technology, inorganic synthesis technology and more.

**For more information,**

please visit our home page: [www.sunjinchem.com](http://www.sunjinchem.com)

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**SUNJIN**  
SUNJIN CHEMICAL R&D  
CENTER

## TECHNOLOGY OVERVIEW

### Technology Overview

#### Micro bead synthesis

##### Silica beads

##### PMMA beads

#### Nano powder synthesis

ZnO, TiO<sub>2</sub>, ZrO<sub>2</sub>, SiO<sub>2</sub>

##### PMMA

#### Encapsulation with

##### Silica

##### PMMA

#### Surface treatment

#### Sol & thin film coating

#### Composition

TiO<sub>2</sub>/Silica

#### Dispersion

TiO<sub>2</sub>

ZnO

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## SILICA BEADS: SUNSIL series

### SUNSIL 130 series α Naked Silica Beads

	Oil absorption	Low	Standard
Avg. Particle size		(0.6 0.9 cc/g)	(0.9 1.3 cc/g)
1 3 μm		-	Sunsil 20
6 9 μm		Sunsil 130L	Sunsil 130
12 16 μm		-	-

*Sunsil-20*

### Oil absorption comparison table

Silica	cc/g( SUN
SUNSIL 150H	
SUNSIL 130H	
SUNSIL 130	
SUNSIL 130L	
Spheron P-1500	0.6
Spheron P-1000	
Spheron L-1500	
H51	
MSS-500/3H	
Silica Bead SB-700	

*Sunsil-130*

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## Silica Beads

Naked silica bead	Size( $\mu\text{m}$ )	Oil (cc/g) Absorption	
SUNSIL 130NP —Non porous“	7	0.40.6	1
SUNSIL 130L —Low“	7	0.60.9	2
SUNSIL 130 —Standard“	7	0.91.2	2
SUNSIL 130H —High oil absorption“	7	1.21.5	3
SUNSIL 20 —Small sized“	2	0.91.2	
SUNSIL 150H —Very High oil absorption“	15	1.42.1	

### Surface treated silica bead

SUNSIL 130SC

Silicone oil coated

For pressed powders --> good pressability

Better smoothness and softer feeling

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## **SUNPMMA S æ The most pure PMMA bead in the world**

### *Specifications*

<b>Size distribution</b>	<b>Poly-dispersed</b>
<b>Appearance</b>	<b>White fine powder</b>
<b>Cross linkage</b>	<b>Cross-linked</b>
<b>Avg. Particle Size</b>	<b>5 10 µm</b>
<b>Apparent density</b>	<b>About 0.71 g/cc</b>
<b>Oil absorption</b>	<b>0.4 0.6 cc/g</b>
<b>Moisture</b>	<b>5% max.</b>
<b>Residual monomer</b>	<b>10 ppm max.</b>
<b>p H</b>	<b>Neutral</b>
<b>Odor</b>	<b>Odorless</b>

### *Regulation*

**INCI Name: Methy  
Polymer  
CAS No: 25777-71-  
EINECS No: Exem  
Custom Tariff No:**

### *Residual Monomer Content Comparison table*

<b>Product</b>	<b>MMA content</b>	<b>EGDMA content</b>	<b>Bad</b>
Jurymer MB-1	144 ppm	0 ppm	
Matsmoto, Microperal M100	44 ppm	0 ppm	
Negami Artpearl	37 ppm	14 ppm	
SUNPMMA-S	Lot: 03042210 7.5 ppm	0 ppm	
	Lot: 03100201 5 ppm	0 ppm	
	Lot: 03111501 6.5 ppm	0 ppm	

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## Porous PMMA Bead α SUNPMMA P

### *Specifications*

Size distribution	Poly-dispersed
Appearance	White fine powder
Cross linkage	Cross-linked
Avg. Particle Size	10 13 $\mu$ m
Apparent density	About 0.35 g/cc
Oil absorption	1.7 2.4 cc/g
Moisture	6% max.
Residual monomer	10 ppm max.
p H	Neutral
Odor	Odorless

PMMA	cc/g(by SUNJIN)	Manufacturer
SUNPMMA-S	0.47	Sunjin
Jurymer MB-1	0.45	Nihon Junyaku
Micropearl M 305	0.45	Matsumoto
SUNPMMA-P	2.12	SUNJIN
Covabead LH85	1.82	Nihon Junyaku
Microsponge 5640	2.02	AP Pharm

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## Poly Urethane Bead: SUNPU, The Most Elastic Polymer Bead

### *Specifications*

Size distribution	Poly-dispersed
Appearance	White fine powder
Avg. Particle Size	17 $\mu\text{m}$
Moisture	5% max.
p H	Neutral
Odor	Odorless

T

10% De

### INCI Name:

HDI/Trimethylol

Hexyl

Lactone cross polymer

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## Poly Ester Bead - SUNPET

Nylon 12 like feeling

### *Specifications*

Size distribution	Poly-dispersed
Appearance	White fine powder
Avg. Particle Size	5 10 $\mu\text{m}$
Moisture	5% max.
p H	Neutral
Odor	Odorless

### *Regulation*

INCI Name: Poly Ethylene Terephthalate

CAS No. 25038-59-9

Tg: 70°C

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## Surface Treated Fillers

### TALC J-DS – Surface treated Talc

MMC

Specification		Spe
Components		Cor
Talc	97.0 %	Seri
Methicone	1.0 %	Mei
Dimethicone	2.0 %	
Appearance		ApI
WHITE POWDER		Od
Odor		Los
ODORLESS		
Loss on Drying		Lea
< 1% (1.0g, 105°C, 2hr)		
Lead		Ars
< 20ppm		
Arsenic		
< 5ppm		

### TiO2 4S – Silicone Oil coated Titanium Dioxide

TiO2

Specification		Spe
Components		Cor
TiO2	96.0 %	TiO
Methicone	4.0 %	AS
Appearance		ApI
WHITE POWDER		Od
Odor		Los
ODORLESS		
Loss on Drying		Lea
< 1% (1.0g, 105°C, 2hr)		
Lead		Ars
< 20ppm		
Arsenic		
< 5ppm		

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May 22, 2003

DOCUMENT-IDENTIFIER: US 20030096910 A1

TITLE: Ion-sensitive, water-dispersible polymers, a method of making same and items using same

Detail Description Table CWU:

12TABLE 12 Particles from Presperse, Inc. selected for use in pre-moistened wipes

Name	Composition	Characteristics
MCP-45	Mica and polymethyl	Fine powder, platelets
methacrylate	coated with microspheres,	13-17 microns
Sericite SL-012	98% mica,	2%
methicone	Fine white powder,	hydrophobic surface,
2-10 microns	Rose talc	Talc White
powder,	10-12 microns	Permethyl 104A
Iso-octahexacontane	(polyisobutene)	Cashmir K-II
Mica (97%),	silica	Fine white powder,
beads (3%),	platelets	coated with 0.3
microns	microspheres,	10-14 microns
Synthetic	Fine powder,	10-15
fluorophogopite	microns	Ganzpearl GMX-0610
Methyl methacrylate	Spherical powder,	crosspolymer
4.5-8.5 microns	Ganzpearl GS-0605	Styrene/ White powder,
4.5-8.5	divinylbenzene	microns copolymer
Ganzpearl PS-8F	Styrene/ 0.4 microns	divinylbenzene
copolymer	Spheron N-2000	Amorphous silica
White powder,	2-15	microns,
low oil absorption	<u>Spheron L-1500</u>	Amorphous silica
White powder,	3-15	microns,
high oil absorption		

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